

## **Constructability Review Guidelines**

### **Purpose:**

Constructability reviews are intended to improve the effectiveness of a set of plans and specification by having those with construction expertise review the plans and specification. Those involved in constructability reviews should be reviewing issues that affect the ability for contractors to understand the plans and specifications well enough to provide well informed bids and meet the Department requirements during construction. Reviewers should also be considering if the plans and specifications are allowing the contractor to perform the work in the most efficient manner possible, while delivering a high quality product. Those conducting the reviews should have knowledge of construction practices and the ability make independent cost estimates of the work elements.

### **Project Selection**

A region project team consisting of the Project Manager, Pre-Construction Engineer, Designer, Construction Engineer and Traffic Engineer, and others should review the project and determine what level of constructability review is appropriate for the project.

At a minimum all projects should be reviewed for constructability and cost by the Region Construction group.

If a project has an issue that can benefit from industry input, but does not justify extensive overall review, the local construction industry expertise should also be utilized. The AGC has agreed to participate in reviewing specific issues of concern as needed. The project manager makes arrangements with central advertising group to place drawings or specifications to be reviewed on the Department website. The project manager writes a cover letter describing specifically the issues that they would like contractor input on. The cover letter also identifies the UDOT contact person and the time frame for desired responses. All contractors in the UDOT bid system will receive an email that notifies them of the request. The response from the contractors is voluntary. They receive no compensation for their efforts. This review should be specific to a certain issue and not require a significant time commitment from the contractors.

In addition to this effort, certain projects should have a more detailed review (hereafter referred to as “formal”) using constructability review consultants from the constructability review consultant pool. Recommended projects for a formal constructability review are those that include interchange modifications, significant geotechnical issues, complicated construction phasing, complicated traffic control, unique or unusual work elements, significant utility or railroad impacts, significant right-of-way impacts, significant environmental impacts, accelerated construction schedule or have difficult estimating issues. In addition, any project that is estimated to exceed \$10,000,000 should have a formal constructability review.

### Timing:

For projects that have significant environmental impacts, the constructability review should begin as the environmental document is being prepared. The review for all projects should begin no later than the plan-in-hand phase of design and continue through PS & E. Adequate time must be scheduled into the design process for reviews to take place.

### Cost

There is strong evidence that constructability reviews will have a very high benefit/cost ratio. Design funds should be allocated to pay for consultant reviews. It is likely that significant cost savings will result in constructability reviews. This may not always be the case, therefore the PM should not count on those savings to fund the review process.